

## CLIMATOLOGICAL DATA FOR MAY, 1911.

## DISTRICT NO. 12, COLUMBIA VALLEY.

EDWARD A. BEALS, District Editor.

## GENERAL SUMMARY.

The month, besides being wet and unusually cool, was marked by the occurrence of a severe storm which first made its appearance off the Washington coast on the morning of the 17th and was 24 hours in crossing the district. The unusually low barometric pressure of 29.15 inches reduced to sea level was reported from Tatoosh Island, Wash., at the time of taking the regular evening observation of that date, and a maximum wind velocity of 78 miles per hour from the southeast occurred at North Head, Wash., at 2.30 p. m. the same day. On account of the ample warnings given, the casualties during this storm were of minor consequence as all deep water vessels were held in port, and so far as learned the only damage done was the capsizing of a few fishing boats at the mouth of the Columbia River. The crews of these boats were rescued by the Life-Saving Service, and the boats and tackle were afterwards recovered. Another stormy period prevailed on the 4th and 5th, at which time the highest winds of the month occurred in the interior of the district.

The excess in rainfall was very beneficial, as the three preceding months were unusually dry. The cool weather, however, caused vegetation to be backward, and early fruit such as strawberries and cherries were late in ripening. Pasturage was excellent and the condition of stock in consequence was above the average. The cool weather retarded the melting of the snow in the mountains, and the annual rise in the Columbia River was late in starting, and at no station was the water above the flood stage at any time during the month.

## TEMPERATURE.

The mean temperature for the month was below normal in all sections of the district, except over a comparatively narrow belt along and near the main range of the Rocky Mountains in Idaho, where temperatures near the normal were reported.

The deficiency averaged greatest in central Oregon, southern Washington, and the central portion of western Idaho, the greatest departure reported being  $-7.3^{\circ}$  at Fort Simcoe, Wash. The highest mean temperatures were reported from southeastern Washington and northeastern Oregon, and the lowest from the mountain stations of Oregon. Along the coast the temperatures were rather uniform during the month, but east of the Cascade Range wide variations were experienced.

With the exception of a short warm period early in the month and another near the close, the weather was cool throughout the month. Cloudy and rainy weather beginning about the 15th culminated in the coolest weather of the month on the 19th and 20th; the lowest temperatures were, however, recorded at most stations during a period of fair weather from the 6th to 11th.

The mean temperature as determined from the records of 253 stations was  $51.1^{\circ}$ , which is  $2.7^{\circ}$  below the district average for May, and ranged between  $41^{\circ}$  at Musick and Pompeii, Oreg., and  $60.8^{\circ}$  at Zindel, Wash., in the Snake River Valley. The highest temperature recorded,  $99^{\circ}$ , occurred at Kennewick, Wash., on the 31st, and the lowest,  $13^{\circ}$ , at Cliff, in the Christmas Lake country, Oregon, on the 25th.

## PRECIPITATION.

The precipitation for the month averaged about 44 per cent above the normal amount for May, the greatest excess being along the coast near the mouth of the Columbia River. All stations in this drainage area in western Montana and Wyoming, and a few stations in eastern Idaho, central Oregon, and northeastern Washington report a deficiency in precipitation. The excess was general west of the Cascade Range..

In the western portion of the district the rainy weather was nearly continuous during the first half of the month, being broken by fair weather only on the 10th and 11th and on the 14th and 15th; the heaviest precipitation, however, occurred generally on the 17th and 18th. In the eastern portion the precipitation occurred in frequent showers, usually light, and was well distributed throughout the month, the most pronounced rainy periods being from the 13th to the 19th and from the 22d to the 28th.

As determined from the records of 354 stations, the average for the district is 2.99 inches, which is 0.91 inch above the normal amount. The greatest precipitation for the month was 14.35 inches at Trask, Oreg., and the least was 0.08 inch at Big Basin, Oreg., on the John Day River. The greatest amount recorded in 24 hours was 2.85 inches on the 18th at Wind River, Wash.

## THE RIVERS. .

The rivers throughout the district were higher than in April, the Columbia showing the greatest and the Willamette the least change. The Willamette and its tributaries averaged nearly normal or a little above, but the mean stage of the Columbia, although much higher than in April, was still below the normal for May. The latter averaged 14 feet, which is 2.7 feet lower than the normal; at the Cascade Locks it was 4.4 feet below the average and 3.2 feet below at The Dalles. The highest water occurred between the 21st and 28th and the lowest in nearly every case on the 1st.

The Willamette River averaged 5.9 feet, which is the normal stage for May. The river at Portland was 1.8 feet below the normal, the departure at this point being governed by the departure from normal in the Columbia River, and at Salem it was 0.1 foot below the normal. The mean stage at Portland was 5.9 feet higher than during April, due to the comparatively large increase in

the Columbia, but at other points on the Willamette the difference between this and last month's average was not great.

The Snake River averaged 9.1 feet, which is 0.9 foot below the May average.

#### MISCELLANEOUS.

Frosts occurred in many localities, but the damage was in most cases reported as being light. The wind movement was rather excessive and the sunshine deficient. Observers in the upper Columbia River Valley report more than the usual amount of snow in the high

mountains. Hail and thunder storms were of frequent and general occurrence throughout the district, and sleet was also reported in many places. Fog prevailed along the coast on the 29th, 30th, and 31st. High winds occurred as follows: North Head, Wash., 78 miles from the southeast on the 17th; Tatoosh Island, Wash., 68 from the south on the 3d; Helena, Mont., 58 from the southwest on the 6th; Lewiston, Idaho, 54 from the west on the 5th; Pocatello, Idaho, 48 from the southwest on the 5th; Seattle, Wash., 34 from the southwest on the 1st, and Portland, Oreg., 32 from the south on the 18th. The prevailing direction of the wind for the district was from the southwest.

TABLE 1.—Climatological data for May, 1911. District No. 12, Columbia Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Sky.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.						
<i>Montana.</i>																				
Anaconda.....	Deer Lodge.....	5,300	10	46.0	- 2.1	78	5	25	27	39	1.95	.....	.....	.....	12	10	9	.....	C. D. Demond.	
Bison Mountain.....	Powell.....	7,240	2	46.0	.....	.....	.....	.....	.....	.....	2.34	.....	0.90	25.0	10	13	14	4	C. H. Anderson.	
Butte.....	Silver Bow.....	5,716	17	46.8	- 1.5	79	31	28	11	39	2.20	- 0.04	1.00	1.4	10	4	7	20	n.w.	
Columbia Falls.....	Flathead.....	3,100	16	47.9	- 3.1	88	31	21	7	50	2.28	- 0.92	0.58	.....	12	5	9	17	s.	
Como **.....	Ravalli.....	3	50.8	.....	.....	79	5	31	11 <sup>+</sup>	38	1.13	.....	0.26	0	9	9	14	8		
East Anaconda.....	Deer Lodge.....	5,500	6	45.2	.....	78	5	26	27	32	1.88	.....	0.42	2.4	14	12	10	9	w.	
Fortine.....	Lincoln.....	2,875	6	46.9	.....	83	31	21	1	45	2.77	.....	0.36	3.0	17	4	5	22	w.	
Hamilton.....	Ravalli.....	3,575	8	51.0	.....	83	5	30	21	43	0.76	.....	0.23	0	6	9	19	3	w.	
Hat Creek.....	Powell.....	6,000	2	.....	.....	.....	.....	.....	.....	.....	2.56	.....	0.45	7.1	14	6	11	14	w.	
Kalispell.....	Flathead.....	2,935	13	48.7	- 2.3	83	31	28	7	18	0.96	- 1.07	0.34	T.	11	4	13	14	se.	
Lost Creek.....	Deer Lodge.....	5,200	3	.....	.....	.....	.....	.....	.....	.....	1.57	.....	0.40	6.0	8	16	6	9	F. Renault.	
McGinnis Meadows.....	Lincoln.....	3,225	33	44.8 <sup>1</sup>	.....	73	5	20	7	42 <sup>1</sup>	.....	.....	.....	.....	13	4	10	10	sw.	
Missoula.....	Missoula.....	3500	33	50.8	- 2.9	86	5	27	7	45	1.00	- 1.10	0.37	.....	13	4	10	10	U. S. Weather Bureau.	
Ophir.....	Powell.....	8,800	2	.....	.....	.....	.....	.....	.....	.....	1.72	.....	0.64	T.	9	7	14	10	w.	
Orondo.....	do.....	4,207	12	44.9	- 2.5	84	5	22	7	51	0.78	- 1.55	0.35	0	8	0	31	10	w.	
Philipsburg.....	Granite.....	5,275	8	46.2 <sup>1</sup>	.....	82	31	23	14	46 <sup>1</sup>	2.21	.....	0.45	T.	13	8	11	11	sw.	
Plains.....	Sanders.....	2,475	13	51.1	- 0.8	89	19	24	7	48	0.73	- 1.00	0.36	0	4	7	0	24	sw.	
Pleasant Valley.....	Flathead.....	3,500	4	45.5	.....	82	31	22	1	47	2.27	.....	0.47	4.0	15	3	22	6	w.	
Polson.....	do.....	2,020	4	50.6	.....	77	31	30	10	35 <sup>b</sup>	1.61	.....	0.46	.....	11	.....	.....	.....	C. E. Proctor.	
Proctor.....	do.....	2,800	7	48. <sup>a</sup>	.....	85	31	30	23 <sup>+</sup>	43	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Reclamation Service.	
St. Ignatius.....	Missoula.....	2,700	6	50.1	.....	78	5 <sup>+</sup>	28	1	41	2.73	.....	0.75	T.	14	7	10	14	n.w.	
St. Regis.....	do.....	2,650	4	48.0	.....	85	31	23	1	51	1.85	.....	0.32	0	13	5	17	9	ne.	
Saltine.....	do.....	3,600	7	.....	.....	.....	.....	.....	.....	.....	4.00	.....	0.72	0.0	12	7	0	24	w.	
Snowshoe.....	Lincoln.....	4,500	5	42.4	.....	74	31	24	7	30	6.95	.....	1.11	28.5	24	7	4	20	w.	
Troy.....	do.....	1,880	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. E. Milnor.		
Willow Glen Stk Farm.....	Deer Lodge.....	5,064	.....	45.8	.....	80	4	24	26	44	2.03	.....	0.53	T.	8	4	16	11	sw.	
<i>Wyoming.</i>																				A. V. Call.
Afton.....	Uinta.....	6,200	7	46.9	.....	79	5	22	7	45	2.05	.....	0.52	0	8	14	4	13	s.	
Alta.....	do.....	7,000	11	44.3	.....	74	31	21	7	44	2.95	.....	1.75	8.5	13	10	12	9	Mrs. Lucy Brown.	
Bedford.....	do.....	5,900	11	45.9	- 0.3	79	31	20	7	47	2.36	.....	0.82	0	8	11	11	9	w.	
Belcher River.....	Yellowstone Park.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.10	.....	0.60	11.0	2	11	2	18	U. S. Army.	
Moran.....	Uinta.....	.....	.....	43.0	.....	75	30 <sup>+</sup>	21	7	45	0.72	.....	0.70	T.	2	26	0	5	sw.	
Snake River.....	Yellowstone Park.....	7,000	.....	40.8	.....	75	31	11	7	47	3.20	.....	0.90	11.0	9	10	8	13	w.	
<i>Nevada.</i>																				U. S. Army.
San Jacinto.....	Elko.....	6	49.2	.....	80	4	24	7 <sup>+</sup>	47	1.50	.....	0.86	T.	5	14	10	7	sw.	Moss Jones.	
<i>Utah.</i>																				U. S. Weather Bureau.
Standrod.....	Boxelder.....	6	49.6	.....	74	30	28	7 <sup>+</sup>	37	0.96	.....	0.44	1.0	8	13	4	14	sw.	T. B. Jones.	
<i>Idaho.</i>																				W. D. Cahoon.
Almo.....	Cassia.....	3	.....	44.2	.....	76	30	20	10	49	1.02	.....	0.58	0	11	9	12	10	s.	
Alpha.....	Boise.....	1	51.8 <sup>b</sup>	- 1.6	84 <sup>d</sup>	31	24	7	52 <sup>d</sup>	1.93	+ 0.36	0.77	T.	12	15	11	5	sw.		
American Falls.....	Oneida.....	4,341	20	51.8 <sup>b</sup>	- 1.4	83	5	24	7	48	1.93	+ 0.43	0.34	0	9	18	13	0	sw.	
Blackfoot.....	Bingham.....	4,503	16	51.8	.....	83	5	24	7	48	1.93	+ 0.43	0.68	0	8	10	20	1	sw.	
Blackfoot Dam.....	Bannock.....	2	45.8	.....	75	31	24	7	40	3.16	.....	0.56	12.5	13	12	5	14	s.		
Bogus Creek.....	Boise.....	4,200	3	.....	.....	.....	.....	.....	.....	.....	4.15	.....	1.14	1.5	10	9	19	3	F. P. Ingraham.	
Bolse.....	Ada.....	2,739	26	53.9	- 3.7	85	4	32	10	36	2.57	+ 1.28	1.65	0	10	9	11	11	se.	
Bonners Ferry.....	Bonner.....	1,850	5	49.0	.....	90	31	26	7	52	2.37	.....	0.67	0	13	7	18	6	sw.	
Boulder mine.....	Boise.....	4,800	2	.....	.....	.....	.....	.....	.....	.....	4.43	.....	1.09	2.0	15	15	10	6	P. Moriarty.	
Buhl.....	Twin Falls.....	3,800	5	54.8 <sup>b</sup>	.....	91	5	27	7	57	1.97	.....	1.15	0	6	5	17	9	w.	
Caldwell.....	Canyon.....	2,372	7	54.8	.....	88	4	29	10	44	1.13	.....	0.45	0	8	6	5	17	Hugh Taylor.	
Carnas.....	Fremont.....	4,815	3	53.3	.....	84	10 <sup>+</sup>	24	12	50 <sup>+</sup>	0.41	.....	0.10	0	11	8	10	11	W. J. Boone, D. D. W. J. Boone, D. D.	
Cambridge.....	Washington.....	2,651	16	51.0	- 4.5	85	31	28	1	46	1.87	+ 0.26	0.46	0	7	9	12	10	Mrs. Edna Faulkner.	
Cedar Creek Dam.....	Twin Falls.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.64	.....	0.61	0	6	8	10	4	C. S. Shepherd.	
Chesterfield.....	Bannock.....	5,424	15	49.3	+ 0.6	78	8 <sup>+</sup>	22	7	47 <sup>+</sup>	1.09	- 0.72	0.29	0	7	12	12	7	Robert Hoffman.	
Clyde.....	Blaine.....	1	42.8	.....	69	31	21	28	33 <sup>+</sup>	1.55	.....	0.78	3.3	0	10	7	13	8	C. S. West.	
Cottonwood Creek.....	Boise.....	4,000	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dick Ross.		
Council.....	Washington.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1.10	.....	0	15	6	5	20	R. R. Richmond.		
Culdesac.....	Nez Perce.....	1,520	3	54.2	.....	85	31	32	5	42	5.63	.....	1.25	0	20	5	15	11	E. Schuessler.	
Dent.....	Clearwater.....	1,350	5	53.6	.....	92	31	28	1	53	5.63	.....	0.61	0	7	11	7	sw.		
Driggs.....	Fremont.....	6,097	4	40.6	.....	77	31	21	7	44	3.32	.....	1.04	0	8	16	2	sw.		
Edie.....	do.....	2	44.2	.....	74	31	23	11	45	5.52	.....	0.75	0	21	6	2	23	J. E. Perkins.		
Emmett.....	Canyon.....	2,350	4	54.0	.....	88	4	28	10	48	2.47	.....	0.77	0	9	8	9	sw.		
Forney.....	Lemhi.....	14	48.6	+ 0.1	82	31	21	7	52	0.18	- 1.71	0.09	3.2	3	6	0	16	w.		
Garden Valley.....	Boise.....	3,000	6	50.0	.....	91	4	36	11	44	1.37	+ 0.74	0.77	0	10	7	18	1	M. B. Merritt.	
Garnet.....	Elmore.....	2,575	12	57.5	- 4.5	91	4	36	11	44	1.37	+ 0.74	1.03	0	3	20	7	4	Mrs. Gertrude M. Ross.	
Glenns Ferry.....	do.....	2,569	3	56.6	.....	92	4	28	11	50	1.86	.....	1.04	0	8	16	2	sw.		
Gooding.....	Lincoln.....	3,572	2	53.3	.....	86	4	26	11	45	1.77	.....	0.75</td							

TABLE 1.—Climatological data for May, 1911. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years	Temperature, in degrees Fahrenheit					Precipitation, in inches					Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
<i>Idaho—Continued.</i>																			
Moscow	Latah	2,748	20	49.2	-3.5	82	31	32	9†	37	2.17	-0.26	0.44	0	14	4	18	9	nw.
Mountain Home	Elmore	3,150	6	52.8	.....	87	4	25	11	51	1.73	0.78	0	7	6	10	9	nw.	
Murtaugh	Twin Falls	5	49.76	.....	82	4†	25	7	49†	1.80	0.66	0	8	.....	.....	.....	.....	w.	
Nezperce	Lewis	3,082	2	48.6	.....	79	31	28	9	41	3.88	0.60	1.15	0	17	5	11	15	P. Mitchell.
Oakley	Cassia	4,700	18	50.9	-2.6	80	4†	30	8†	43	1.75	+0.65	0	6	12	15	4	John Adams.	
O'Hara Bar	Idaho	1,400	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. D. Agnew.	
Orofino	Naz Perce	1,027	7	52.8	.....	88	31	30	7	47	6.20	1.61	0	20	5	21	5	E. F. Allen.	
Payette	Canyon	2,159	20	54.1	-5.2	89	4	30	10	40	1.41	+0.25	0.45	0	10	8	14	9	n.
Peaceful Valley	do	3,325	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. W. Newton.	
Pebble	Bannock	5,277	3	48.4	.....	77	5†	22	7	45	2.33	0.63	0.5	9	12	12	7	sw.	
Pierson	Custer	7,000	3	43.0	.....	72	30	12	6†	47	1.78	1.08	0	11	15	8	8	Mrs. Fannie Say.	
Pleasant Valley	Ada	3,000	4	52.4	.....	85	4	25	10	47	1.78	0.48	T.	13	11	13	7	C. E. Friedrich.	
Pocatello	Bannock	4,483	12	52.2	-3.3	81	31	31	7	42	1.62	-0.58	0	16	4	11	sw.		
Pocatello Nursery	do	5,396	5	46.2	.....	78	5	21	7	47	2.11	-0.13	0.30	0	13	6	8	U. S. Weather Bureau.	
Porthill	Bonner	1,685	22	50.4	-3.4	80	31	29	7	42	3.55	0.57	T.	10	15	12	4	Mrs. Anna M. Wrensted.	
Pyle Creek	Boise	3,100	2	.....	.....	.....	.....	.....	.....	.....	.....	0.28	0	10	8	17	s.		
Richfield	Lincoln	2	52.0	.....	82	4	24	11	44	2.12	0.55	T.	6	1	25	5	nw.		
Roseberry	Boise	1	44.0	.....	76	31	22	25	45	1.42	0.45	T.	7	18	6	7	W. H. Hartwell.		
Rupert	Twin Falls	2	52.0	.....	82	5†	26	7†	48	1.28	0.45	0.45	0	17	7	7	Vill Parry.		
St. Maries	Lincoln	4,204	5	52.0	.....	82	5†	26	7†	48	0.98	+1.63	1.16	0	17	7	7	J. S. Turnbull.	
Salmon	Kootenai	2,263	15	51.0	-3.0	84	31	32	7†	39	4.25	+0.83	0.13	0	6	8	23	B. C. d'Easum.	
Salmon River Dam	Lemhi	4,040	6	51.3	.....	82	5	29	10	43	0.30	0	1.0	0	14	8	17	A. M. Gilbert.	
Sandpoint	Twin Falls	2,086	4	49.7	.....	80	4	23	7	50	1.50	0.80	1.0	0	18	6	4	J. H. Edgerton.	
Shoshone	Bonner	3,968	4	52.2	.....	85	31	25	1	46	4.36	0.70	0	18	9	9	O. A. Truman.		
Silver City	Owyhee	6,280	4	.....	83	4	28	11	41†	1.98	1.00	0	9	.....	.....	.....	A. D. Bradfield.		
Smith Ranger Station	Bowen	1,900	1	.....	.....	.....	.....	.....	.....	3.96	2.05	5.0	11	8	17	6	T. D. Crittenden.		
Soldier Creek	Blaine	1	47.4 <sup>m</sup>	.....	74	31	26	27	39	.....	.....	.....	.....	.....	.....	.....	J. E. Minear.		
Spirit Lake	Kootenai	2	49.2	.....	86	31	25	1†	47	3.79	0.77	0	17	17	6	8	M. C. Krause.		
Springfield	Bingham	4,420	3	52.1	.....	83	5	25	7†	49	2.03	0.45	0	10	9	15	7	Mrs. W. A. Edwards.	
Sugar	Fremont	2	50.0	.....	80	5	25	7	43	1.44	0.43	0	7	9	6	16	Utah-Idaho Sugar Co.		
Sunnyside	Elmore	2	51.8	.....	85	4	29	10	41	1.63	1.05	0	5	.....	.....	.....	E. A. Wilmot.		
Tripod Mountain	Boise	4,300	2	.....	.....	.....	.....	.....	.....	2.91	0.75	T.	9	10	11	10	Mrs. Verna Paddock.		
Twin Falls	Twin Falls	3,825	6	51.2	.....	82	30†	26	7†	51	1.74	0.94	0	9	5	25	1	J. A. Waters.	
Vernon	Fremont	14	49.6	+0.6	80	5†	24	11	43	2.11	+0.83	0.82	1.2	0	9	12	3	A. M. Slater.	
Wallace	Shoshone	2,728	4	49.2	.....	87	31	30	7†	44	4.84	0.79	0	22	.....	.....	.....	U. S. Weather Bureau.	
Wendell	Lincoln	3,400	3	54.4	.....	86	4	28	11	45	2.00	1.08	0	10	12	12	7	Chas. L. Dingler.	
<i>Washington.</i>																			
Aberdeen	Chehalis	162	20	49.8	-3.1	78	29	34	11	37	8.12	+3.77	1.73	0	16	5	21	w.	
Anacortes	Skagit	60	17	51.2	.....	72	31	31	2	39	3.08	+1.09	0.72	0	13	11	17	3	Douglas Allmond.
Baker	do	200	5	54.0	.....	82	29	35	20	38	4.03	0.90	0	14	8	8	15	Robert M. White.	
Bellingham, near	Whatcom	60	16	52.9	-0.7	78	29	37	20†	39	2.60	+0.18	0.70	0	14	14	11 <sup>a</sup>	5 <sup>a</sup>	Sanford B. Mayhew.
Beverly	Grant	57	14	51.9	-0.1	72	31	35	20	30	3.05	+0.10	1.14	0	15	4	21	6	U. S. Bureau Plant Industry.
Blaine	Whatcom	2,200	1	.....	.....	.....	.....	.....	.....	2.28	0	0.45	0	10	13	0 <sup>b</sup>	8 <sup>b</sup>	Harry A. Averill.	
Blewett	Chelan	30	.....	.....	.....	.....	.....	.....	.....	2.78	0	0.84	0	14	.....	.....	.....	John W. Sheets.	
Bremerton	Kitsap	1,620	1	54.4	.....	90	31	35	6	36	1.90	0	0.65	0	9	10	19	2	John Burnster.
Bumping Lake	Okanogan	3,400	1	.....	.....	.....	.....	.....	.....	6.52	0	1.23	0	14	8	7	16	U. S. Reclamation Service.	
Cedar River	King	535	4	.....	.....	.....	.....	.....	.....	4.52	+1.97	0.77	0	13	7	18	6	George Landsburg.	
Centralia	Lewis	212	18	52.6	-2.1	86	31	82	20	47	4.52	+0.54	1.66	0	14	10	0	I. S. Turner.	
Cheney	Spokane	2,351	12	50.0	.....	80	31	30	6	41	1.66	-0.41	0.36	0	14	10	0	J. E. Buchanan.	
Cle Elum	Kittitas	1,930	12	48.1	-2.6	88	31	25	1†	48	2.83	+1.86	0.83	0	11	16	8	J. A. Balmer.	
Clearbrook	Whatcom	140	8	51.0	.....	80	29	29	20	44	3.75	0	0.86	0	12	2	17	sw.	
Colfax	Jefferson	135	15	.....	.....	.....	.....	.....	.....	6.52	0	1.23	0	9	4	18	C. A. Bullard.		
Colville	Whitman	2,300	22	52.6	84d	31	28	20	40	1.72	-0.09	0	0	12	19	4	I. B. Doolittle.		
Connelly	Stevens	1,635	11	52.6	-2.5	90	31	28	1†	48	2.45	+0.54	0.59	0	16	6	7	sw.	
Cowiche	Okanogan	2,300	11	51.8	-2.5	85	31	29	20	40	4.34	+2.54	1.10	0	16	9	7	W. L. Sax.	
Crescent	Yakima	53.6 <sup>a</sup>	11	53.6 <sup>a</sup>	7.3	90	31	28	10	45	1.07	0	1.07	0	8	8	11	Wm. Baines.	
Davenport	Lincoln	2,450	2	50.4	.....	84	31	31	6†	40	1.33	0.27	0	12	19	4	8	U. S. Reclamation Service.	
Dayton	Columbia	1,700	25	53.6	-2.5	84	31	33	20	37	2.53	+0.62	0.77	0	10	15	6	Otto Wohlweber.	
Deer Park	Spokane	47,700	2	57.0	.....	90	31	28	29	50	2.53	+0.62	0	10	15	6	James L. Thayer.		
Detroit	Mason	30	3	52.8	.....	94	31	36	11†	49	4.35	1.06	0	15	7	15	9	W. W. Hendron.	
Dixie	Walla Walla	5,000	2	.....	.....	.....	.....	.....	.....	7.68	2.15	4.0	0	14	6	4	sw.		
Dryden	Chelan	980	.....	.....	.....	.....	.....	.....	.....	1.33	0.54	0	0	9	15	11	sw.		
Duckabush	Jefferson	380	3	52.4 <sup>a</sup>	.....	88	31	33	10†	40 <sup>b</sup>	1.33	0	0	4 <sup>b</sup>	4 <sup>b</sup>	9 <sup>b</sup>	9 <sup>b</sup>	Valley Power Co.	
Eastsound	San Juan	500	16	.....	.....	.....	.....	.....	.....	1.33	0	0	0	4 <sup>b</sup>	4 <sup>b</sup>	9 <sup>b</sup>	9 <sup>b</sup>	E. G. Newman.	
Ellensburg	Kittitas	1,571	23	51.8	-3.1	82	30	30	1†	45	1.54	+0.86	0.46	0	7	11	7	R. Lee Barnes.	
Ephrata	Grant	1,265	8	57.0	.....	92	31	32	7	40	1.19	0	1.10	0	9	6	6	T. J. Cook.	
Forks	Clallam	480	2	.....	.....	.....	.....	.....	.....	1.19	0	0	0	9	6	3	E. A. Markham.		
Fort Simcoe	Yakima	1,427	17	51.8	-7.3	90	31	26	10	45	4.25	+3.51	1.80	0	7	15	11	Dr. F. H. Monk.	
Goat Lake	Snohomish	2,900	2	.....	.....	.....	.....	.....	.....	6.72	1.20	3.5	1.20	0	12	9	10	C. M. Mackintosh.	
Gold Basin	do	49.2	.....	.....	.....	.....	.....	.....	.....	9.68	1.56	0	16	14 <sup>a</sup>	7 <sup>a</sup> </				

TABLE 1.—Climatological data for May, 1911. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Number of rainy days. 0.01 inch or more.	Number of clear days.	Number of part- ly cloudy days.	Number of cloudy days.	Prevailing wind direc- tion.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.						
Washington—Contd.																				
Longmire Springs.	Pierce.	2,800	2								3.37		0.64	0	13	4	13	14	se.	National park ranger.
Lost Creek.	Okanogan.	3,125	2												P. H. Leese.					
Lucerne.	Chelan.	1,100	4												Mrs. Barbara Schearer.					
McConahie.	Grant.	57.0													Mrs. M. McConahie.					
McCumbe's ranch.	Yakima.	2,182	2												Mrs. Mary McCumber.					
Mottinger.	Benton.	307	11	59.6	-3.1	83	31	39	11†	39	3.50	+ 0.40	0.29	0	10	9	6	16	s.	G. H. Mottinger.
Mount Pleasant.	Clallam.	48.3													Wm. M. Dorr.					
Moxee.	Yakima.	1,000	19	54.8	-3.2	93	31	36	6†	38	9.96	+ 0.19	0.29	0	10	7	14	10	w.	H. B. Squudder.
Newport.	Stevens.	2,400	1	49.2		86	31	25	1	48	2.88		0.38	0	17	5	20	6	sw.	Charles M. Talmadge.
North Head.	Pacific.	211	9	47.8	-3.4	58	29	42	5	10	5.14	+ 2.75	1.23	0	17	2	7	23	nw.	U. S. Weather Bureau.
Northport.	Stevens.	1,350	12	54.6		92	31	30	6†	44	2.41	+ 0.37	0.43	0	18	9	4	18	w.	Frank Janneck.
North Yakima.	Yakima.	1,070	2	56.9		94	31	30	6	43	1.10		0.34	0	9	12	9	10	nw.	Albert Bender.
Nutland.	Klickitat.	56.8													Ruth J. Shepard.					
Odessa.	Lincoln.	1,540	8	54.6		97	31	39	12	45	0.72		0.27	0	7	5	12	14	sw.	Wm. U. Neely.
Olga.	San Juan.	50	21	51.6	-1.2	68	24†	40	17	21	10.10	+ 1.04	1.04	0	11	10	12	9	se.	Cecil S. Willis.
Olympia.	Thurston.	200	33	52.2	-2.5	86	31	32	20	47	4.09	+ 1.45	1.04	0	12	8	11	12	sw.	M. O'Connor.
Omak.	Okanogan.	850	2												W. G. Tait.					
Oroville.	do.	922	2	55.6		96	31	31	27	48	2.35		0.46	0	10	8	14	9	s.	E. M. Stansbury.
Peola.	Garfield.	5,000	2												Samuel Gruell, sr.					
Pomeroy.	do.	1,500	19	52.2	-5.0	84	31	31	8	41	2.20	+ 0.33	0.47	0	14	4	14	13	w.	Peter McClung.
Port Crescent.	Clallam.	258	16	47.5	-1.6	67	24	33	11	29	2.89	+ 0.58	0.75	0	16	2	18	11	nw.	U. S. Weather Bureau.
Port Townsend.	Jefferson.	80	21	51.4	-2.0	74	29†	37	1	28	2.93	+ 1.04	0.80	0	10	9	7	15	sw.	Frank Plummet.
Pullman.	Whitman.	2,550	19	48.9	-4.0	83	31	32	9	37	2.39	+ 0.54	0.82	0	14	7	11	13	nw.	State Agricultural College.
Quinault.	Chehalis.	300	4												A. V. Higley.					
Republic.	Ferry.	2,628	11	48.8	-3.1	83	31	26	1†	51	3.75		0.75	0	17	7	6	18	nw.	Geo. B. Stocking.
Rex Creek.	Chelan.	1,135	4	54.4†		83	31	33	6	33†	1.06		0.40	0	7	3	10	13	s.	James W. Nicol.
Ritzville.	Adams.	1,825	12												Agent, Northern Pacific Ry.					
Rock Lake.	Whitman.	1,910	5	52.9		90	31	30	11	47	1.99		0.48	0	13	6	9	16	sw.	P. M. Ramsey.
Rosalia.	do.	2,425	19	50.3	-2.3	84	31	31	6†	39	2.64	+ 0.58	0.42	T.	16	6	5	17	w.	Hans Mummu.
Russell's ranch.	Yakima.	2,870	2	52.2		84	31	29	1†	52	3.52		1.80	11.0	11	5	19	7	nw.	Miss Maggie M. Russell.
Seattle.	King.	123	20	52.7	-2.3	78	29	40	11	29	2.48	+ 0.16	0.54	0	18	6	9	11	s.	U. S. Weather Bureau.
Sedro Woolley.	Skagit.	38	14	53.8	-1.2	85	29	34	1†	44	5.56	+ 2.32	1.67	0	18	8	10	13	nw.	Mrs. H. L. Devin.
Sixprong.	Klickitat.	1,240	4	57.0		92	31	34	6	37	1.02		0.31	0	8	13	1	17	sw.	C. E. Comstock.
Skagit Power Dam.	Whatcom.	1													Skagit Power Co.					
Snohomish.	Snohomish.	100	17	52.6	-2.1	82	29†	34	20	42	3.14	+ 0.22	0.52	0	16	11	1	19	nw.	Warren Hodge.
Snoqualmie Falls.	King.	667	12	54.1		86	30	34	11	43	0.78	+ 2.26	1.45	0	16	10	12	2	e.	O. N. Wiswall.
Snyder's ranch.	Okanogan.	2,200	2	49.2		84	30	27	1†	47	0.99		0.50	0	9	11	18	2	w.	G. M. Snyder.
South Bend.	Pacific.	16	50.2	-3.0		78	29†	34	20	39	7.83	+ 3.10	1.75	0	17	5	15	11	sw.	Miss Winifred Eichner.
Spokane.	Spokane.	1,943	30	52.5	-3.6	87	31	33	7	39	1.33		0.20	0	12	4	9	16	s.	U. S. Weather Bureau.
state University.	King.	170	2	52.1		77	29†	40	11†	29	2.35		0.48	0	15	11	9	16	nw.	University of Washington.
Stoke's ranch.	Okanagan.	2,679	2												Charles W. Gunn.					
Summer.	Pierce.	77	3	51.2		78	29	33	11	40	3.60		0.55	0	17	6	6	19	nw.	H. E. Thompson.
Sunnyside.	Yakima.	740	16	55.8	-2.6	90	31	31	24	42	1.01	+ 0.43	0.24	0	11	11	14	6	sw.	U. S. Reclamation Service.
Tacoma.	Pierce.	213	25	52.2	-2.3	76	29	36	11	30	3.18	+ 0.64	0.92	0	18	7	7	17	s.	U. S. Weather Bureau.
Tatoosh Island.	Clallam.	86	26	48.0	-1.6	66	24	40	6	21	4.25	+ 0.16	1.24	0	13	6	6	19	n.	Do.
Tieton.	Yakima.	2,000	2	48.7		86	31	28	6	40	3.60		1.78	0	10	6	14	11	nw.	U. S. Reclamation Service.
Tonasket.	Okanogan.	945	56	56.5		92	31	35	6†	41	2.43		0.59	0	12	9	12	10	sw.	E. H. Twilight.
Touchet.	Walla Walla.	556	4	56.4		90	31	30	7	47	1.75		0.48	0	11	9	11	11	n.	D. W. Dorrance.
Touchet Ridge.	Columbia.	2,500	2												R. H. King.					
Trinidad.	Douglas.	900	7	58.4		93	31	31	6	35	3.04		0.18	0	17	10	7	18	n.	J. C. Wheeler.
Vancouver.	Clarke.	100	36	54.2	-3.4	80	31	35	11	39	4.08	+ 1.67	1.31	0	14	6	7	20	sw.	A. A. Quarnberg.
Vashon Island.	King.	40	22	52.7	-1.3	78	29†	38	6	34	3.79	+ 1.45	0.73	0	17	9	2	20	s.	Miss Gertrude McClintock.
Wahluke.	Grant.	410	7	50.4		95	31	37	7†	42	0.51		0.17	0	5	10	12	8	n.	F. C. Koppen.
Wallace.	Okanogan.	4,000	2												G. A. Wallace.					
Walla Walla.	Skamania.	1,000	27	56.4	-4.3	60	31	39	9	36	5.64	+ 1.81	0.98	0	15	10	6	15	w.	U. S. Weather Bureau.
Waterville.	Douglas.	650	11	51.8	-2.6	82	30	35	11†	35	6.52	+ 2.59	1.25	0	17	8	7	16	sw.	F. M. Grout.
Wenatchee, near.	Chelan.	2,624	21	50.2	-3.2	87	31	28	6	43	1.84	+ 0.52	0.64	0	11	7	13	11	n.	O. R. Hopewell.
White Salmon.	Klickitat.	54.2	0	89	30	36	11	41	28	1.81		0.72	0	14	8	10	13	sw.	George A. Pitcher.	
Wilbur.	Lincoln.	2,203	12	52.8		90	31	21	7	50	2.06	+ 0.56	0.65	0	11	8	6	17	n.	R. J. Reeves.
Wind River.	Skamania.	50.2		87	31	33	11†	46	9	8.87		2.85	0.16	0	11	6	9	16	nw.	U. S. Forest Service.
Winthrop.	Okanogan.	54.7		98	31	30	32	20†	39	11.28		1.60	0	9	12	13	16	n.	Methow Trading Co.	
Yale.	Cowlitz.	375	4	52.8		87	30	32	20†	39	11.28		2.25	T.	19	8	11	12	sw.	J. A. Williams.
Zillah.	Yakima.	56.4		93	31	31	7†	47	50	0.70		0.26	0	8	14	13	4	n.	C. G. Ware.	
Zindel.	Asotin.	715	9	60.8		87	20	37	10	44	2.19		0.55	0	9	8	12	11	n.	M. W. Zindel.
<i>Oregon.</i>																				
Albany.	Linn.	212	30												F. M. French.					
Ashland.	Jackson.	1,963	28	53.8	-3.1	85	30	31	6	40	1.71	+ 0.44	0.62	18	18	3	8	10	w.	G. G. Eubanks.
Astoria.	Clatsop.	16	51	50.6	-4.7	73	29	38	3	48	3.88	+ 3.08	1.53	0	21	8	8	15	nw.	Irving Club.
Baker.	Baker.	3,466	21	47.6	-2.7	81	31	27	9	39	1.47	- 0.26	0.73	1.0	13	5	17	9	s.	U. S. Weather Bureau.
Bay City.	Tillamook.	14	17	49.5	-2.5	70	29	34	11†	31	8.16									

TABLE 1.—Climatological data for May, 1911. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Data.	Lowest.	Data.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unadjusted.	Number of rainy days.	Number of clear days.	Number of partly cloudy days.			
<i>Oregon—Continued.</i>																				
Glenora.	Tillamook.	575	20	49.2	— 3.0	85	30	32	22	46	12.15	+ 5.85	2.31	0	16	5	6	20	nw.	Mrs. Jennie A. Reeber.
Gold Beach.		40	10																c. Dewey.	
Granite.	Grant.	2,680	6	42.7		75	31	23	97	46	1.35		0.30	t.	9	5	14	12	nw.	L. N. Ford.
Grants Pass.	Josephine.	956	23	54.0	— 2.7	89	30	28	1	48	1.17	— 0.8	0.46		9	7	5	19	sw.	John B. Paddock.
Grass Valley.	Sherman.	2,381	10																Agent O.-W. R. & N. Co.	
Headworks.	Clackamas.	719	9	53.0		83	30	35	11	31	1.78	+ 1.90	1.19	0	22	7	10	14	s.	Portland Waterworks.
Heppner.	Morrow.	1,950	21	51.8	— 3.1	84	31	30	6	34	2.04	+ 0.44	0.48	0	12	9	4	18	w.	Ralph M. Kenton.
Hermiston.	Umatilla.	451	4	57.4		92	31	30	3	48	1.51		0.28	0	8	16	13	2	e.	C. W. Kellogg.
Hermoso Rio.	Crook.	49.9				86	31	27	13	44	1.27		0.53	0	9	12	9	10	w.	Carl T. Hubbard.
Hood River.	Hood River.	300	21	52.2	— 3.2	88	30	31	11	44	2.61	+ 1.41	0.70	0	12	12	3	18	sw.	H. L. Hasbrouck.
Huntington.	Baker.	2,165	10	56.6		84	10†	35	2	44	0.31		0.20	0	4	5	20	6	w.	L. Connell.
Jacksonville.	Jackson.	1,640	23	53.8	— 2.6	86	30	32	6	42	1.60	— 0.19	0.46	0	6	10	8	13	s.	E. Britt.
Joseph.	Wallowa.	4,400	22	45.9	— 2.6	80	30	25	9	51	3.89	+ 1.91	0.65	4.0	13	4	6	21	sw.	F. F. McCully.
Klamath Agency.	Klamath.	4,169	3	50.6		77	30	29	1†	43	0.13		0.05	1.3	3	18	7	6	s.	Edson C. Watson.
Klamath Falls.	do.	4,100	22																w.	W. H. Heileman.
La Grande.	Union.	2,784	24	49.2	— 4.7	83	31	29	11†	43	3.86	+ 1.67	0.53	0	18	10	7	14	w.	W. A. Worstell.
McKenzie Bridge.	Lane.	1,400	10	49.9	— 4.1	87	30	26	20	55	5.91	+ 1.02	1.45	0	21	8	0	23	sw.	Geo. Frissell.
McMinnville.	Yamhill.	182	24	52.8	— 2.4	86	30	34	11†	41	2.85	+ 0.80	0.77	0	14	11	5	15	sw.	J. H. Pruitt.
Marshfield.	Coos.	34	10	49.4	— 4.0	69	29	35	11	27	5.36		0.89	0	21				sw.	U. S. Weather Bureau.
Medford.	Jackson.	55.0		90	30	31	6	48	1.49		0.53	0	7	8	13	10	nw.	Mrs. Belle O'Gara.		
Merrill.	Klamath.	4,070	5	47.4		80	30	29	9	44	0.78		0.28	0	5	15	2	14	sw.	Mrs. Agnes Pitchon.
Metolius.	Crook.	49.0		87	31	23	23†	49	0.90		0.24	0	10	11	8	12	12	sw.	W. E. Sotzman.	
Mikkalo.	Gilliam.	1,400	5	53.5		89	31	30	6	43	0.45		0.19	0	5	9	12	10	w.	Frank Little.
Miramonte Farm.	Clackamas.	185	23	53.5	— 2.3	86	30	35	19†	40			0	0	8	9	14	sw.	G. Muecke.	
Monroe.	Benton.	350	14	52.4	— 1.8	82	30	32	11	37	3.63	+ 1.68	1.08	0	16	8	6	17	w.	L. A. Peek.
Mount Angel.	Marion.	485	25	54.0	— 2.7	84	30	39	20	35	4.75	+ 1.96	0.82	0	14	9	8	14	w.	Dr. Urbain Fisher.
Mount Hood.	Hood River.	1,650	1																sw.	S. G. Babson.
Musick.	Douglas.	5,000	2	41.0		70	30	25	10	30	11.21		2.00	34.0	20	10	4	17	nw.	Alex. Lundberg.
Newport.	Lincoln.	69	24	49.8	— 2.5	64	29†	37	24	21	5.57	+ 1.14	0.90	0	19	7	11	13	sw.	Wm. Matthews.
North Bend.	Coos.																		High School.	
Paisley.	Lake.	4,500	8	48.7		77	21	26	6	37	0.10		0.10	0	1	12	15	4	w.	E. C. Woodward.
Paulina.	Crook.	45.0		78	30†	20	25	49	1.81		0.40	1.7	13	7	2	22	n.	Orrin C. Mills.		
Pendleton.	Umatilla.	1,070	22	55.4	— 2.5	92	31	28	11	50	1.47	+ 0.08	0.39	0	9	8	21	2	w.	E. F. Averill.
Pilot Rock.	do.	1,817	3	54.3		88	31	30	6	52	1.68		0.33	0	14	4	21	6	sw.	John P. McManus.
Pompeii.	Clackamas.	3,879	16	41.0	— 2.2	74	24†	26	11	35	7.40	+ 1.82	1.90	32.0	0	18	4	18	sw.	O. C. Yocom.
Portland.	Multnomah.	57	41	54.3	— 2.5	84	30	39	24	32	3.95	+ 1.59	1.02	0	18	4	7	20	nw.	U. S. Weather Bureau.
Port Orford.	Curry.	80	6	49.8		73	29	32	10	24	7.15		1.54	0	15	13	5	13	n.	J. D. Loucks.
Prineville.	Crook.	2,864	15	48.8	— 4.4	73	10	22	18†	34	1.16	+ 0.24	0.40	0	9	8	18	8	w.	George Summers.
Prospect.	Jackson.	2,800	5	49.2		86	30	25	10	53	3.45		0.91	3.0	14	5	18	8	w.	E. F. Graham.
Ramsey.	Wasco.	1,350	10	50.6		86	31	26	23	40	1.27		0.25	0	15	0	16	16	e.	Mrs. Iva B. Collins.
Range.	Grant.	3,500	3								0.28		0.05	0	12	6	10	15	w.	Mrs. Emma Arbuckle.
Redmond.	Crook.			48.8		85	31	24	9	64			0.53	0	7	11	10	10	sw.	E. E. Foote.
Richland.	Baker.	2,350	10	51.4		86	31	27	10	45	1.34								sw.	L. G. Morgan.
Riverside.	Malheur.	3,000	12																sw.	Mrs. Leah Fairman.
Roseburg.	Douglas.	510	23	53.8	— 2.2	87	30	34	11	42	1.75	— 0.30	0.06	0	16	7	12	12	nw.	U. S. Weather Bureau.
Salem.	Marion.	120	21	53.3	— 2.5	85	30	40	11†	32	2.78	+ 0.25	0.47	0	15	6	1	24	sw.	M. P. Baldwin.
Silver Lake.	Lake.	4,700	14	46.6	— 2.2	78	21†	22	6	49	0.82	— 0.41	0.20	0	9	6	20	5	w.	L. W. Charles.
Siskiyou.	Douglas.	4,115	3	46.4		74	29†	27	6	37	2.26		0.61	5.0	11	2	16	13	n.	U. S. Weather Bureau.
Sparta.	Baker.	4,150	20	48.0	— 2.8	80	31	27	10	42	1.26	+ 0.65	0.37	0.5	11	8	14	9	w.	J. A. Wright.
Starford.	Clackamas.	400	15	53.0	— 1.6	84	30	34	20	37	5.41	+ 2.61	1.03	0	20				sw.	John P. Gage.
The Dalles.	Wasco.	112	37																sw.	B. L. Brooks.
Toledo.	Lincoln.	75	21																sw.	C. B. Crosno.
Umatilla.	Umatilla.	340	23	59.0	— 1.9	94	31	38	7†	43	1.53	+ 0.83	0.54	0	8	17	2	12	w.	Mrs. Helen T. Duncan.
Vale.	Malheur.	2,242	19	55.2	— 0.6	89	31	28	10	45	1.15	+ 0.02	0.32	0	7	17	9	5	nw.	H. P. Osborne.
Van.	Harney.	3,506	6																geo. Howe.	
Wallace Orchard.	Polk.	170	2	52.6		84	30	34	11	40	3.68		0.71	0	17	4	14	13	w.	Chas. A. Park.
Wallowa.	Wallowa.	2,935	8	47.7		85	31	26	7	49	3.17		0.73	0	16	2	7	22	w.	L. J. Coverstone.
Wamic.	Wasco.	1,500	10	49.2*		87	30	19	29	60*	0.24		0.16	0	2	2	7	7	w.	A. J. Swift.
Warmspring.	Crook.	1,500	9	52.7		89	31	27	13†	48	0.41		0.18	0	4	17	7	7	w.	Claude C. Covey.
Wasco.	Sherman.	1,263	4																w.	J. R. Howell.
Westfall.	Malheur.	3,000	51.8			81	7	32	34	44	0.60		0.25	0	5	17	0	14	w.	H. M. Gilliam.
Weston.	Umatilla.	1,800	19	51.0	— 3.9	85	31	32	6†	48	5.05	+ 2.67	1.99	0	14	5	10	16	sw.	M. A. Baker.
Williams.	Josephine.	1,388	19	52.0	— 3.7	86	20	27	6†	54*	1.05	— 0.55	0.60	0	6	11*	9*	10*	s.	Francis J. Leroy.
Yonna.	Klamath.	4,146	4			79	21				0.67		0.18	0	6	4	22	5	w.	Jacob Ruecke.

a, b, c, etc., indicate respectively, 1, 2, 3, etc., days missing from the record.

\* Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for May, 1911. District No 12, Columbia Valley.*

Stations.	River basins.	Day of month.																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total	
<i>Montana.</i>																																		
Anaconda.	Missoula.	T.	.01																															1.95
Bison Mountain.	do.	20	.10																														2.34	
Butte.	do.	10																															2.20	
Columbia Falls.	Flathead.	T.																														2.28		
Como.	Bitter Root.																															1.13		
East Anaconda [1].	Missoula.	T.	.01	T.	.05																											1.13		
Fortine.	Flathead.	T.	.06	.05	.33																											2.77		
Hamilton.	Bitter Root.																															0.76		
Hat Creek.	Missoula.	T.	.16		.08																											2.56		
Kalispell.	Flathead.	T.	.06	.13																												0.96		
Lost Creek.	Missoula.																															1.57		
McGinnis Meadows.	Kootenai.	.04	.02																													1.00		
Missoula.	do.	.01																														1.72		
Ophir.	do.	.15																														0.78		
Orondo.	do.	T.																														2.27		
Philipsburg.	Columbia.	T.	.07		.06	.19																										0.73		
Pleasant Valley.	Kootenai.	.07																														1.01		
Poison.	Flathead.																															1.01		
Proctor.	do.	T.																														2.73		
St. Ignatius.	do.	T.	.12	.01	.39																											1.85		
St. Regis.	Missoula.	.08																														4.00		
Saltse.	do.	.22	.13	.44																												6.95		
Snowshoe.	Kootenai.	.21	.33	.47	.06	.49	.04																									2.03		
Troy.	do.	T.																														2.03		
Willow Glen Stock Farm.	Missoula.	T.																														2.03		
<i>Wyoming.</i>																																		
Afton.	Snake.	12																														2.05		
Alta.	do.	.05	.23	.05																												3.95		
Bedford.	do.	.07	.10	.08																												2.36		
Belcher River.	do.																															1.10		
Moran.	do.																															7.22		
Snake River.	do.	T.	.30	.20																												3.20		
<i>Nevada.</i>																																		
San Jacinto.	Snake.	T.																														1.59		
<i>Utah.</i>																																		
Standrod.	Raft †.	.12																														0.90		
<i>Idaho.</i>																																		
Almo.	Snake.	T.	.05																													1.02		
Alpha.	Payette.	.04	.25	.02	T.	.04																									2.55			
American Falls.	Snake.	.17																														1.93		
Blackfoot [1].	do.	.15			T.																										1.92			
Blackfoot Dam.	do.	.20	.10																													3.16		
Bogus Creek.	Payette.	.07	T.	.62	.43	T.																									4.15			
Bolse.	Bolse.	T.	.04	.47	.01	T.																									2.57			
Bonners Ferry.	Kootenai.	.30	.04	.10	.36																										2.37			
Boulder Mine.	Bolse.	.07	.03	.12	.02	.09	.56																								0.97			
Buhl.	Snake.																															1.13		
Caldwell.	Bolse.	T.																														1.87		
Camas.	Lost R. Reg.	T.	.15																													1.54		
Cambridge.	Snake.																															1.09		
Cedar Creek Dam.	do.	.11																														1.54		
Chesterfield.	do.	.09	T.	T.	T.	T.	.04																								1.54			
Clyde.	Lost R. Reg.																															1.00		
Cottonwood Creek.	Boise.																																	
Council.	Snake.																																	
Dent.	Clearwater.	1.10	.25																													5.63		
Driggs.	Snake.	.48	.32																													3.32		
Edie.	Snake.																															2.52		
Emmett.	Lost R. Reg.	T.	.27																													2.47		
Forney.	Payette.																															0.18		
Garden Valley.	Salmon.	T.	.15																													2.58		
Garnet.	Snake.																															1.77		
Glenns Ferry.	do.																															1.86		
Gooding.	Wood-Malad.	.02																														1.77		
Grand Forks.	St. Joe.	.23	.15	.70	.50	.20																									5.18			
Grandview.	Snake.	T.	.01																													0.90		
Grimes Pass [1].	Boise.	.20	.16																													4.08		
Guffey.	Snake.	T.	.03																													1.12		
Hailey.	Wood-Malad.	.02	.03																													2.91		
Hotspring.	Snake.	T.																														2.02		
Idaho Falls.	do.	.05	.14	.02																												2.46		
Indian Valley [1].	do.																															2.46		
Irwin.	do.	.29																														2.46		
Kellogg [1].	Coeur d'Alene.	.20	.47	.32																												5.29		
Kirkham.	Payette.	.31	.29																															

TABLE 2.—*Daily precipitation for May, 1911. District No. 12—Continued.*

Stations.	River basins.	Day of month.																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.	
<i>Idaho—Continued.</i>																																		
Nez Perce.	Clearwater.	.12	.28	.42																														3.88
Oakley.	Snake.																																1.75	
O'Hara Bar.	Clearwater.																																6.20	
Orofino.	do.	.63	.68	.70	.16	.02	.17																									1.41		
Payette.	Payette.	T.	.03	T.	.19	.22	.01																									2.33		
Pebble.	Snake.	do.	.23	.04																													2.33	
Pierson.	Salmon.																																1.78	
Pleasant Valley.	Boise.	.08	.29	.01																													1.02	
Pocatello.	Snake.	.14	.01	T.																													2.11	
Pocatello Nursery.	do.	.17	.09																														1.93	
Porthill.	Kootenai.	T.	.22	.13	.02	.27	.13	.07																								2.55		
Pyle Creek.	Payette.	.05	.10	.05	.41	.02																										2.12		
Richfield.	Wood-Malad	.10	T.		.06		T.																									1.42		
Roseberry.	Payette.	.18		.15	.03																											1.28		
Roseworth.	Snake.	T.			.04																											0.98		
Rupert.	do.	.04																															4.25	
St. Maries.	St. Joe.	.43	.11	.06	.11	.28	.08	.02																							4.25			
Salmon.	Salmon.																															0.30		
Salmon River Dam.	Snake.	.02	.05																													1.50		
Sandpoint.	Pend Oreille.	.08	.57	.20	.20	.08	.27	.09	.02	.17																				4.36				
Shoshone.	Wood-Malad	T.	.10		T.	.06		T.																							1.98			
Silver City.	Owyhee.	T.	.22		.36	.11	T.	T.	T.																					3.96				
Smith Ranger Sta.	Kootenai.																															1.60		
Soldier Creek.	Wood-Malad	T.	T.																												3.79			
Spirit Lake.	Pend Oreille.	.45	.29	.19	.01																										2.03			
Springfield.	Snake.	do.	.11																													1.44		
Sugar   .	do.	T.	T.	.05	.40		T.																									1.63		
Sunnyside.	Tripod Mountain.	.19		.32	.33																											2.91		
Tripod Mountains.	Twin Falls.	T.		.06																												1.74		
Vernon.	do.	.50	.05																													2.62		
Wallace.	C. d'Alene.	.23	.10	.08	.08	.68		.06	.14	.06																					4.84			
Wendell.	Wood-Malad																															2.00		
<i>Washington.</i>																																		
Aberdeen.	Coast.	13	61	1.44	1.73	.27	.31	.25	.19	.20																						8.12		
Anacortes.	Puget Sound.		.05	.07	.72	.05	.02	.48	.43	.03																					3.08			
Baker.	do.	.11	.42	.90	.21	.11																										4.03		
Bellingham.	do.	T.	.03	.08	.20	.70	.09	.03	.68	.19	.01																			2.60				
Bellingham, near.	do.	T.	.07	.22	.83	.04	.07	.72	.21	.03	T.																			2.67				
Beverly.	Blaine.																															3.05		
Blewett.	Puget Sound.	.02	.10	.31	.70	.10	.04	.14	.24																						2.28			
Bremerton.	Wenatchee.	do.																														2.78		
Bumping Lake.	Puget Sound.	16	10	.84	.24	.06																									1.90			
Cedar River.	Columbia.	T.		.13																												1.90		
Centralia.	Puget Sound.																															6.52		
Chemey.	do.	.09	.07	.32	.73	.56	T.	.05	.14	.13	T.																			1.66				
Clealum.	Spokane.	.11	.16	.14	T.	.02																									2.83			
Clearbrook.	Yakima.																														3.75			
Clearwater.	Puget Sound.	.03	.23	.52	.71	.28	.06	.86	.46	.03	.16																			1.90				
Colfax.	Coast.	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		1.72			
Colville.	Puget Sound.																														2.45			
Conconully.	Columbia.																														4.34			
Cowiche.	Okanogan.																														2.12			
Crescent.	Spokane.																														1.33			
Davenport.	Columbia.																														1.33			
Dayton.	do.																														2.53			
Detroit.	Puget Sound.	20		.91	1.06	.33	.14	.02	.16	.10																			4.35					
Dixie.	Columbia.	T.	.78	.15		.10	T.																							7.68				
Dryden.	Wenatchee.	T.	.01	.06																										1.33				
Duckabush.	Puget Sound.	93	1.20	2.50	.38	.10	.09	.23	.10																				1.54					
East Sound.	do.																														1.50			
Ellensburg.	Yakima.																														1.90			
Ephrata.	do.																														1.90			
Forks.	Coast.																														4.25			
Fort Simcoe.	Yakima.																														6.72			
Goat Lake.	Puget Sound.																														9.68			
Gold Basin.	do.																														3.03			
Goldendale.	Columbia.	.02	.10	.09																											6.84			
Granite Falls.	Puget Sound.	.34	.37	.57	.90	.14																									1.19			
Hatton.	Columbia.																														1.83			
Huntsville.	do.																														3.52			
Irene Mountain.	do.																														0.65			
Kennewick.	do.																														2.70			
Kettle Falls.	do.																																	

TABLE 2.—*Daily precipitation for May, 1911. District No. 12—Continued.*

Stations	River basins.	Day of month.																													Total.			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	3		
Washington—Contd.																																		
North Yakima.	Yakima.	T.	.05	T.	.01	T.		28	T.		.08	.06	T.	T.	T.	.01																	1.10	
Nutland.	Columbia.	T.	T.	T.	T.	T.	T.	20			.27	.03	T.	.09	.04	T.																0.72		
Odessa.	do.	T.	T.	T.	T.	T.	T.			.07	.04	T.	.09	.34	.04	T.																1.35		
Olga.	Puget Sound.	.05		.10	.94	.10	.16	.45	.54		.44		.16		.04	.12	T.															3.10		
Olympia.	do.	.04	.18	.53	.04	.57	.10	T.	.11	.12	.41																					4.09		
Omak.	Okanogan.																																	
Oroville.	do.	T.	.19	.17																														2.35
Peola.	Snake.	.16	.17																															2.75
Pomeroy.	do.	.10	.05																															2.20
Port Crescent.	Coast.	.01	.08	.43	.68	.04	.08	.11	.16	.18	.20	.33																			2.89			
Port Townsend.	Puget Sound.	T.	.19	.31	.57																												2.93	
Pullman.	Palouse.	.19	.13	.04	.12	.04																											2.39	
Quinault.	Coast.																																	
Republic.	Kettle.	.08	.14	.11	.13																												3.75	
Rex Creek.	Columbia.	T.	.04	.33																													1.06	
Ritzville.	do.	.06	.05	.06	.02																												2.04	
Rock Lake.	Palouse.	.08	.07		.15	.20																										1.99		
Rosalia.	do.	.34	.16	.10	.09	T.																										2.04		
Russell's ranch.	Yakima.	T.	.04	.06	.05																											3.52		
Seattle.	Puget Sound.	.04	.08	.48	.18	.17	.02	.12	.06	.08	.09	.01																			2.48			
Sedro Woolley.	do.	.08	.06	.26	.67	.01	.06	.90	.63	.05																					5.56			
Sixprong.	Columbia.	T.	T.																														1.02	
Skagit Power Dam.	Puget Sound.																																	
Snohomish.	do.	.08	.12	.52	.28	.18																											3.14	
Snoqualmie Falls.	do.	.11	.57	.42	.39	.08																											0.78	
Snyder's ranch.	Columbia.	T.	27																														2.09	
South Bend.	Coast.	.09	.65	.55	.17	.49	.31	.09	.39	.18																						7.83		
Spokane.	Spokane.	.08	.19	.02	.03	T.																											1.33	
State University.	Puget Sound.	.10	.09	.48	.03	T.																										2.35		
Stoke's ranch.	Columbia.	.06	T.	.03																													2.72	
Summer.	Puget Sound.	.08	.26	.50	.44	.04	.02	.26	.12	T.																						3.60		
Sunnyside.	Yakima.	.07	.01		T.																												1.01	
Tacoma.	Puget Sound.	.06	.15	.71	.52	.40	.02	.08	.15	.16	.02	.03	.18	.03																	3.18			
Tatoosh Island.	Coast.	.03	.35	.38	.18	.06	.07	.58	.25	T.	T.	.10	.21	T.																	4.25			
Tieton.	do.	T.	.07																														3.10	
Tonasket.	Okanogan.	.10																															2.43	
Touchet.	Columbia.	.02	.05		T.																												1.75	
Touchet Ridge.	do.	.15		.60	.20	.80																										8.60		
Trinidad.	do.	.03																															0.84	
Vancouver.	do.	.11	.06	.30	.22	.40	.04	T.	.09	.19																						4.04		
Vashon Island.	Puget Sound.	.20	.30	.73	.52	.05	T.	.15	.14	.06	T.																				3.79			
Wahluke.	Columbia.																																0.51	
Wallace.	Okanogan.	.04	.03	.23	.04	T.																										4.60		
Walla Walla.	Columbia.	.12	.13	.05																													3.64	
Washougal.	do.	.08	.40	.64	.15	.40	.15																									6.52		
Waterville.	do.	T.	T.	.05																													1.84	
Wenatchee.	do.	T.	.03	.06																													1.42	
White Salmon.	do.	T.	.11	.07	.12	.02																											2.81	
Wilbur.	do.																																2.06	
Wind River.	do.	.05	.71	.92	.48	.06	.35																									9.87		
Winthrop.	do.	.01																															3.55	
Yale.	do.	.45	.28	.48	.16	.10	.20	.50	.08	.87	.11	.25	.03																	11.28				
Zillah.	Yakima.	.01	.05	.02																												0.70		
Zindel.	Snake.																																2.19	
<i>Oregon.</i>																																		
Adel.	SE. drainage.																																	2.85
Albany.	Willamette.	.03	.03	.08	.48	.10																											1.16	
Ailingham.	Deschutes.																																	0.52
Ana River.	SE. drainage.	T.	.10																														0.44	
Ashland.	Rogue.	.04		T.	.48																												1.71	
Astoria.	Columbia.	.12	.24	.96	1.47	.18	.13	.12	.08	.28	.01																				6.88			
Bagley's ranch.	Snake.	T.	.10	.15	.30																													

TABLE 2.—*Daily precipitation for May, 1911. District No. 12—Continued.*

TABLE 2.—*Daily precipitation for May, 1911. District No. 12—Continued.*

Stations.	Riverbasins.	Day of month.																													Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Oregon—Continued.																																			
Susanville.....	John Day.....	T.	.10	.10	.10				.40	.20			.30	.20	.05	T.	.20	.10	.30														.06	2.31	
Tamarack.....	do.....	.60	.10	.50	.60	.20			.30	.10			.25	.10			.12	.35	.33														4.55		
Telocaset.....	Snake.....																																		
The Dalles.....	Columbia.....																																		
Tiaroo Cabin.....	Umatilla.....	.05	.08	.14				.50	.12			.32	.36		.17	.72	.08	.28														3.88			
Toledo.....	Coast.....																																		
Trail.....	Rogue.....	.02	.02		.47				.07	.02			.05	.06	T.		.63	.07	.34													T.	1.65		
Trask.....	Coast.....		1.60	2.40	1.10	.35	.28	.55			.80	1.00	.16			.16	.63	1.92	2.00	.32												14.35			
Umatilla.....	Columbia.....	T.	.09	T.				.04	.10	T.		.54		.14					.17														1.53		
Unity.....	Snake.....	T.	.08		T.	.06		.07	.04		T.								.04	.17	.01	.13										0.63			
Vale.....	Malheur.....	T.	.03		.05	.28													.32	.32	.09	.08										1.15			
Valley Falls.....	SE. drainage.....																																		
Van.....	Malheur.....	T.	T.		.04	T.	T.	T.																									24	0.61	
Wallace Orchard.....	Willamette.....	.10	.06	.31	.17	.47	.13	.03	.09	.06			.37	.01			.06	.50	.47													3.68			
Walloupe.....	Grnd. Ronde.....	.24	.08		.03	T.			.13	.03			.22	.15	.04	.14	.55	.30	.58	.18												2.97			
Wallowa.....	do.....	T.	.43	.03	.02	.05	T.		.11	.07			.18	.08	.09	.28	.33	.16	.54	.05												3.17			
Wamic.....	Deschutes.....	T.																															0.24		
Warmspring.....	do.....	T.	T.	T.																													0.41		
Wasco.....	Columbia.....	.12		.08				.57		.03			.12																				1.34		
Welches.....	do.....																																		
Westfall.....	Malheur.....	.09																																0.59	
Weston.....	Walla Walla.....	T.	.28	.04	T.	.03	T.	T.	.49	.08			.38	.03	.20	.25	.15	.04														5.05			
Williams.....	Rogue.....																																	1.05	
Yonna.....	Int. drainage.....	T.																																T.	0.67

\* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

|| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

## MONTHLY WEATHER REVIEW.

MAY, 1911

TABLE 3.—Maximum and minimum temperatures at selected stations for May, 1911. District No. 12, Columbia Valley.

Date.	Montana.				Idaho.																Boise.				Bonners Ferry.		Hot- spring.		Lewiston.		Mackay. <sup>§§</sup>		Meadows.		Pocatello.		Salmon.		Shoshone.		Vernon.		Wallace.	
	Kalispell.		Missoula.		Afton, Wyo.		Boise.				Bonners Ferry.		Hot- spring.		Lewiston.		Mackay. <sup>§§</sup>		Meadows.		Pocatello.		Salmon.		Shoshone.		Vernon.		Wallace.															
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.														
1	67	30	68	29	55	28	68	50	72	28	70	41	78	41	45	28	.....	.....	62	34	62	37	65	34	56	40	69	31																
2	60	33	63	47	57	31	66	48	60	34	72	45	70	50	47	30	.....	.....	61	42	60	43	65	41	56	33	60	42																
3	62	36	68	40	58	34	71	47	55	40	77	46	66	48	55	34	.....	.....	70	47	65	44	72	45	63	38	61	41																
4	69	45	76	42	70	32	85	56	70	44	89	51	81	52	70	36	.....	.....	78	45	77	44	83	43	75	38	70	43																
5	78	41	86	43	79	34	69	38	59	33	87	52	67	45	75	39	.....	.....	81	38	82	42	78	42	80	45	70	46																
6	49	35	64	36	70	30	54	35	59	35	62	39	62	40	71	34	.....	.....	54	36	56	42	55	36	69	36	50	36																
7	63	28	67	27	67	23	70	42	65	26	74	37	71	38	72	34	.....	.....	69	31	70	31	71	30	68	26	65	30																
8	61	38	66	44	74	37	60	46	56	29	72	50	62	38	72	39	.....	.....	68	47	66	44	65	48	70	37	56	41																
9	54	35	58	33	64	30	55	34	55	37	62	36	54	37	55	38	.....	.....	54	38	53	37	58	34	59	39	52	38																
10	52	37	52	40	48	24	57	32	59	36	65	28	63	38	53	25	.....	.....	54	33	55	29	60	30	54	28	54	36																
11	58	40	66	32	57	24	69	41	60	35	72	34	73	38	66	27	.....	.....	64	38	62	32	68	28	60	24	65	32																
12	62	41	64	41	68	25	67	48	59	32	80	45	59	48	67	27	.....	.....	73	40	76	34	72	38	62	26	62	42																
13	52	41	71	36	69	51	56	41	57	28	60	44	57	47	66	28	.....	.....	66	44	65	44	70	37	65	31	52	37																
14	62	40	59	41	69	34	67	41	65	28	68	42	64	48	67	28	.....	.....	75	41	67	43	69	35	73	30	61	40																
15	61	40	57	45	62	39	53	46	62	36	73	47	61	45	42	32	.....	.....	57	41	60	44	64	43	63	42	63	39																
16	54	40	60	44	52	31	61	42	55	32	66	44	64	51	47	34	.....	.....	60	40	60	42	49	40	65	38	54	46																
17	57	41	60	40	51	31	56	40	56	40	64	45	62	47	47	36	.....	.....	56	38	55	37	57	34	56	35	56	42																
18	54	42	54	40	54	30	54	43	52	35	63	42	56	47	53	32	.....	.....	49	36	50	37	51	37	50	30	50	36																
19	55	42	56	38	52	32	57	42	59	36	65	30	66	46	50	31	.....	.....	54	36	54	36	56	35	56	30	52	38																
20	63	39	64	41	54	26	63	38	66	30	67	35	72	40	60	30	.....	.....	60	34	61	37	63	32	58	27	63	34																
21	62	38	68	32	62	25	74	44	63	40	77	38	73	44	61	32	.....	.....	70	36	70	34	66	31	66	36	56	36																
22	60	37	72	33	65	33	74	53	60	29	78	50	68	45	66	36	.....	.....	69	49	74	46	65	48	73	39	60	38																
23	56	32	61	31	74	32	63	44	60	36	75	45	69	40	62	40	.....	.....	73	48	62	38	68	45	72	44	62	30																
24	45	35	57	39	73	37	59	45	52	35	70	45	57	43	60	38	.....	.....	68	48	69	39	68	44	68	41	74	34																
25	50	34	58	36	63	30	59	34	66	35	64	38	60	40	61	40	.....	.....	54	40	57	42	60	46	56	39	56	34																
Mns..	59.9	37.5	64.3	37.4	62.7	31.1	65.0	42.8	63.7	34.4	71.7	41.8	67.5	43.8	59.9	33.5	.....	.....	64.7	39.7	64.2	38.4	65.7	38.6*	64.4	34.9*	61.0	37.5																

## Washington.

Date.	Aberdeen.		Blaine.		Colville.		Kosmos.		Lakeside.		North Head.		North Yakima.		Odessa.		Port Crescent.		Seattle.		Sixprong.		Spokane.		Tacoma.		Tatoosh Island.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	54	39	70	40	75	28	64	36	73	41	50	44	76	40	77	36	54	41	61	45	76	44	71	37	59	42	52	42
2	52	46	58	47	64	48	56	46	68	45	49	44	66	44	78	39	52	42	59	48	64	46	59	46	57	44	50	44
3	52	44	57	46	60	45	54	45	62	44	49	45	65	42	69	40	50	39	56	46	66	46	59	48	57	47	50	44
4	59	42	62	44	75	35	70	46	59	46	52	45	68	49	70	41	55	41	63	46	75	50	72	50	65	46	53	41
5	54	42	62	45	64	42	55	41	64	44	50	42	66	46	75	39	52	45	69	46	71	43	54	42	49	43	53	43
6	57	39	56	37	59	33	58	38	62	39	49	43	64	30	72	35	49	38	56	41	63	34	55	37	58	40	49	40
7	57	42	59	43	68	29	68	43	60	40	51	46	72	37	76	30	54	40	55	45	75	39	66	33	60	46	48	44
8	55	42	54	45	65	33	60	40	58	33	50	43	72	41	74	31	51	44	59	45	64	44	56	44	55	45	53	45
9	49	42	52	43	69	38	58	40	66	42	49	44	63	39	79	33	52	43	50	44	62	38	58	43	50	43	48	43
10	55	39	55	44	65	35	57	39	71	41	50	44	68	42	77	32	51	37	55	42	67	40	59	38	56	43	50	43
11	50	34	54	44	67	32	62	46	49	44	72	40	70	30	49	33	57	40	40	47	73	41	66	40	57	36	48	44
12	51	41	54	46	56	48	55	41	64	43	48	44	65	40	60	34	43	42	52	45	70	46	58	44	53	44	49	46
13	55	43	57	45	68	39	58	40																				

TABLE 3.—*Maximum and minimum temperatures at selected stations, May, 1911. District No. 12—Continued.*

Date.	Walla Walla, Wash.	Oregon.																			
		Ashland.		Baker.		Eugene.		Gold Beach.		Hermiston.		Marshfield.		Portland.		Prineville.		Roseburg.		The Dalles.	
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.	78	52	50	45	63	36	65	45	—	70	51	57	42	55	46	62	46	62	46	72	30
2.	68	48	62	46	59	41	61	47	—	80	32	57	49	59	51	58	44	64	50	72	43
3.	66	50	64	44	58	42	61	48	—	75	30	57	46	57	49	59	41	63	47	70	45
4.	81	54	74	45	76	46	64	48	—	74	33	68	50	67	50	78	45	76	46	89	45
5.	71	45	64	36	68	34	69	40	—	75	50	57	42	54	48	67	40	60	40	87	48
6.	62	40	66	31	54	32	53	40	—	66	34	58	37	60	48	67	36	67	38	63	31
7.	72	40	63	40	60	35	60	39	—	77	32	56	39	65	47	71	38	66	41	67	33
8.	57	43	53	37	55	38	68	38	—	74	40	52	41	54	44	64	33	53	39	68	38
9.	58	39	60	38	48	27	54	40	—	65	38	52	42	54	44	65	43	56	39	66	31
10.	65	44	65	38	55	29	55	38	—	67	44	55	37	58	44	73	43	64	35	67	28
11.	72	41	72	38	65	32	57	35	—	76	33	58	35	64	41	64	35	73	34	75	33
12.	59	46	66	45	58	38	66	41	—	74	45	54	45	58	46	60	35	54	46	69	40
13.	59	45	56	37	49	36	67	42	—	75	37	55	43	55	45	65	37	59	43	65	41
14.	63	43	68	41	54	34	60	43	—	74	35	57	45	62	46	70	45	64	44	70	40
15.	61	50	67	38	53	40	61	40	—	71	49	52	46	63	50	64	32	67	38	66	51
16.	62	50	59	43	53	37	67	46	—	71	48	60	40	62	48	54	42	60	44	61	47
17.	60	46	56	41	49	34	60	46	—	66	42	54	44	54	46	60	51	61	47	56	36
18.	59	47	52	39	49	37	50	44	—	66	54	53	46	58	45	53	22	53	38	69	41
19.	64	44	62	35	54	36	51	34	—	66	50	56	39	59	41	50	29	62	37	64	41
20.	69	41	78	38	63	33	59	34	—	74	37	63	38	70	41	54	35	76	36	72	33
21.	75	51	78	47	69	39	67	37	—	72	38	59	39	70	51	50	35	76	43	76	35
22.	68	46	70	50	63	41	70	40	—	75	35	54	37	67	43	64	33	67	43	81	53
23.	68	41	62	39	51	35	59	40	—	82	39	51	44	55	44	53	30	57	41	67	44
24.	60	42	55	37	55	35	54	40	—	74	45	51	38	49	39	50	35	52	42	66	45
25.	60	42	63	39	50	30	54	45	—	65	44	54	46	57	47	56	24	58	44	66	29
26.	60	44	65	40	54	38	56	43	—	69	45	50	45	60	46	53	22	64	43	66	44
27.	69	46	71	38	58	32	61	39	—	74	40	57	38	64	45	52	35	72	38	70	33
28.	71	41	82	43	64	32	65	37	—	78	38	58	44	78	46	64	30	78	40	75	33
29.	75	46	84	46	68	37	75	42	—	81	39	69	42	82	54	62	33	86	44	78	35
30.	84	53	85	50	77	38	79	46	—	89	45	59	42	84	56	66	56	87	46	84	39
31.	89	53	81	50	81	46	82	51	—	92	45	57	48	84	57	68	40	74	52	89	52
Means.....	67.2	45.6	66.5	41.0	59.0	36.1	62.3	41.5	—	73.8	40.9	56.7	42.2	62.2	46.4	60.8	36.8	65.5	42.0	71.2	39.3

<sup>a</sup>, <sup>b</sup>, <sup>c</sup>, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

Data are from standard instruments not supplied by the United States Weather Bureau.

<sup>cc</sup> Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.